

## METHODS TO REDUCE/PREVENT SOIL EROSION

- ❖ Practice conservation tillage
- ❖ Farm along the field contour
- ❖ Create physical barriers on steep slopes by planting strips of grass or by creating hillside ditches
- ❖ Protect the soil surface by maintaining plant or crop residue cover at all times



*Mulching with leaves protects the soil*

- ❖ Add organic matter in the form of leaf mulch, compost, green manure, and/or animal manure.

## WHAT ELSE SHOULD I KNOW?

For more information on preventing and reducing soil erosion, call your local United States Department of Agriculture Natural Resources Conservation Service (NRCS) at 735-2111.



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## SOIL EROSION

### *WHAT IT MEANS FOR TROPICAL FARMERS*

**E fausi leleia e ou fanua  
oe pea e fausi lelei i ou  
fanua.....**



**Take care of the land and  
the land will take care of  
you....**

Hugh H. Bennett from "Soil  
Conservation in the World Ahead"

# WHAT IS SOIL EROSION?

Soil erosion is a natural process. It becomes a problem when human activity increases its intensity and severity.



Erosion by water starts when a single drop of rain impacts bare soil, destroying soil aggregates and dislodging individual soil particles. These dislodged soil particles are then transported down slope into streams, rivers, and coral reefs.

Human activities, such as agriculture, can accelerate and intensify soil erosion.

## TYPES OF WATER EROSION

♦ **Sheet erosion** is relatively uniform erosion over the soil surface. Evidence of sheet erosion is pedestals formed under small rocks.



♦ **Rill erosion** begins when rain water concentrates in parallel channels called rills.



♦ **Gully erosion** creates deep channels that cannot easily be erased with cultivation.



# WHAT ARE THE EFFECTS OF SOIL EROSION?

The most damaging effect of soil erosion is the loss of soil itself. Usually the soil eroded away is more valuable than the soil left behind. Eroded soil carries away topsoil, organic matter and nutrients needed for vigorous plant growth.



Over time, the land becomes less and less productive until the soil can no longer sustain crop production.

Soil loss due to water erosion reduces crop yields.